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Theimer

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(54) **MOBILE TELEPHONE FOR INTERNET-APPLICATIONS**

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(52) **U.S. Cl.** **370/338**; 370/310; 370/259; 709/217

(58) **Field of Search** 370/310, 312, 370/338, 401, 328; 455/456, 422, 411, 426, 466, 457; 340/825.06, 825.07; 705/10, 513; 709/218, 217, 203

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,263,178 A		11/1993	Liukkonen	455/76
5,353,328 A		10/1994	Jokimies	379/58
5,392,282 A		2/1995	Kiema	370/77
5,490,235 A		2/1996	Von Holten et al.	395/2.79
5,802,351 A		9/1998	Frampton	395/500
5,956,487 A	*	9/1999	Venkatramann	709/218
6,148,253 A	*	11/2000	Taguchi	701/48
6,170,007 B1	*	1/2001	Venkatraman	709/218

FOREIGN PATENT DOCUMENTS

DE	196 03 483 A1	9/1996
DE	197 13 538 A1	8/1997
GB	2 282 936 A	4/1995
WO	WO 97/26750	7/1997

OTHER PUBLICATIONS

GSM PLMN Makes a Mobile Office Viable; Petri Pöyhönen; pp. 375–378.
"MobileWeb Changing The Face Of Mobile Networking Through Universal Wireless Connectivity", P. Kennedy, IEEE Technical Applications Conference, 1996, pp. 89–94.
"Nokia 9000 Technical Specifications", internet document.
S. Demmelhuber "Daten ubers Handy", Funkschau 8/96, pp. 28–35.
"Die fast totale Kommunikation", Elektronik Sep. 1996, p. 30.
A. Lehmann, "Mobil ins Internet", Funkschau 13/97.
Booklet of the Nokia mobile phone Nokia 9000, Sep. 1996.
Prior art disclosure statement.

* cited by examiner

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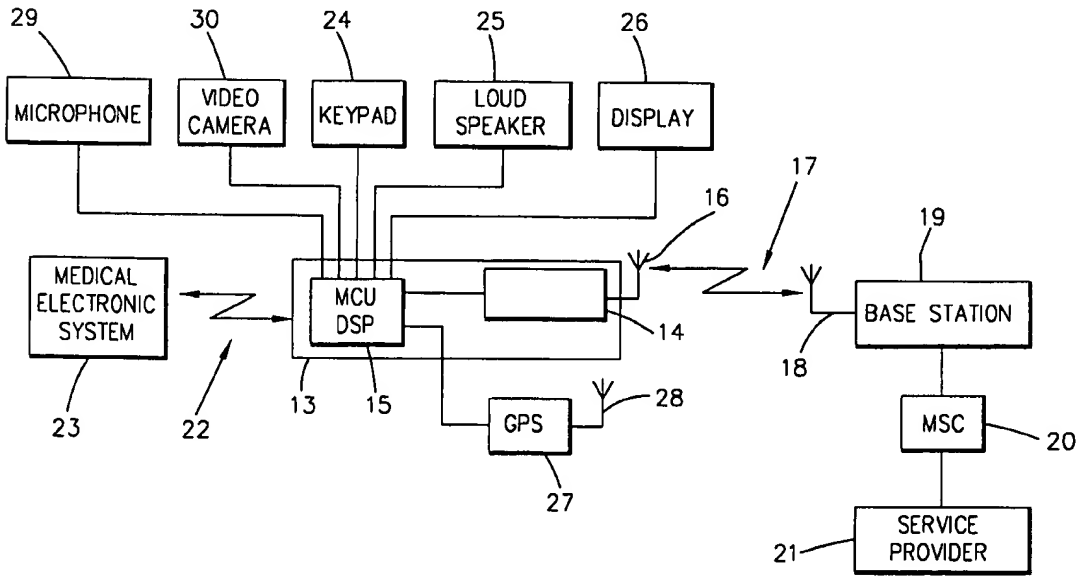
(57) **ABSTRACT**

A mobile telephone for Internet applications comprising at least one WEB server which can be coupled to at least one further server and to at least one client.

20 Claims, 4 Drawing Sheets



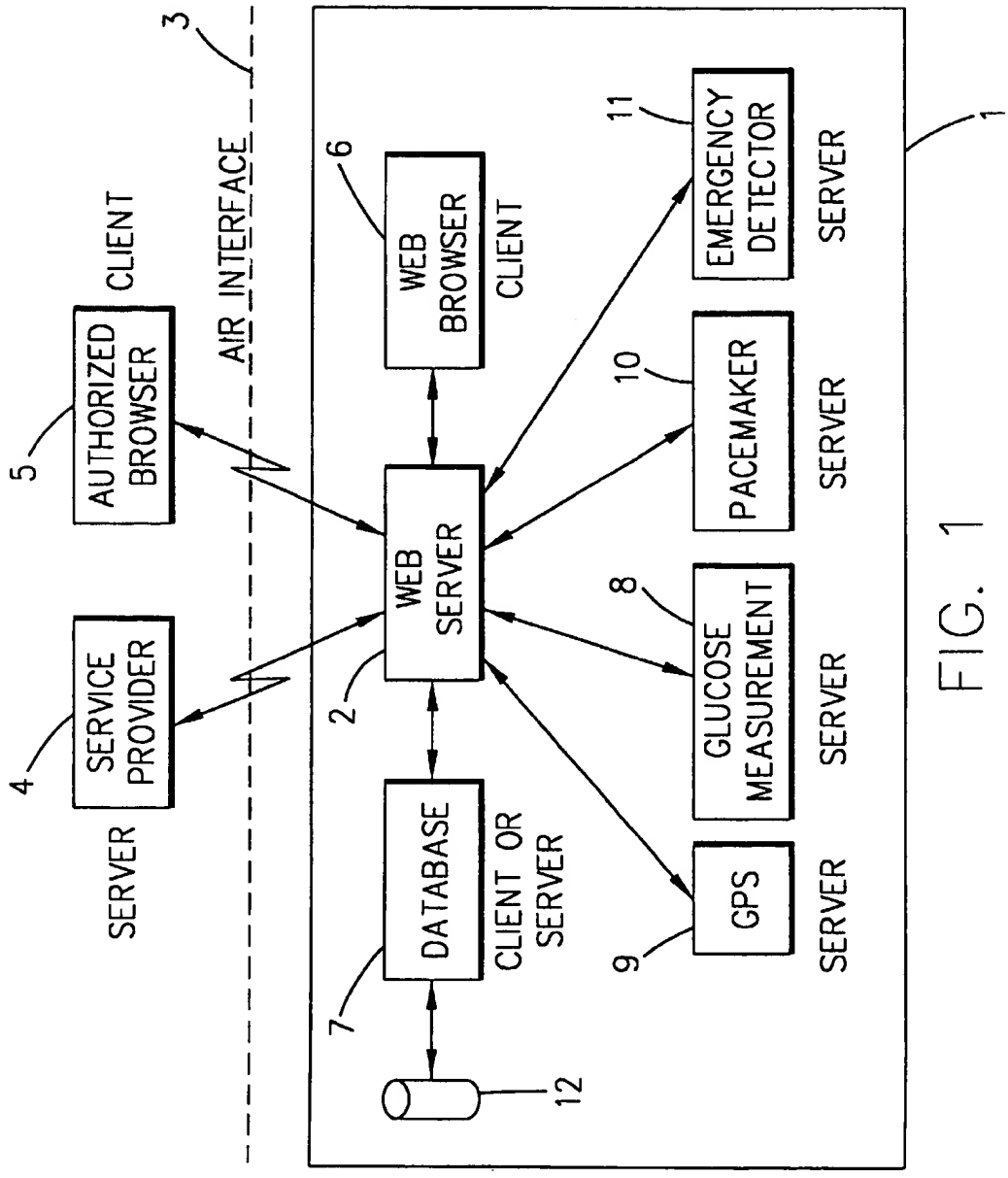

3
AIR INTERFACE
5
AUTHORIZED BROWSER
CLIENT
4
SERVICE PROVIDER
SERVER
6
WEB BROWSER
CLIENT
2
WEB SERVER
7
DATABASE
CLIENT OR SERVER
12
11
EMERGENCY DETECTOR
SERVER
10
PACEMAKER
SERVER
8
GLUCOSE MEASUREMENT
SERVER
9
GPS
SERVER
1

FIG. 1

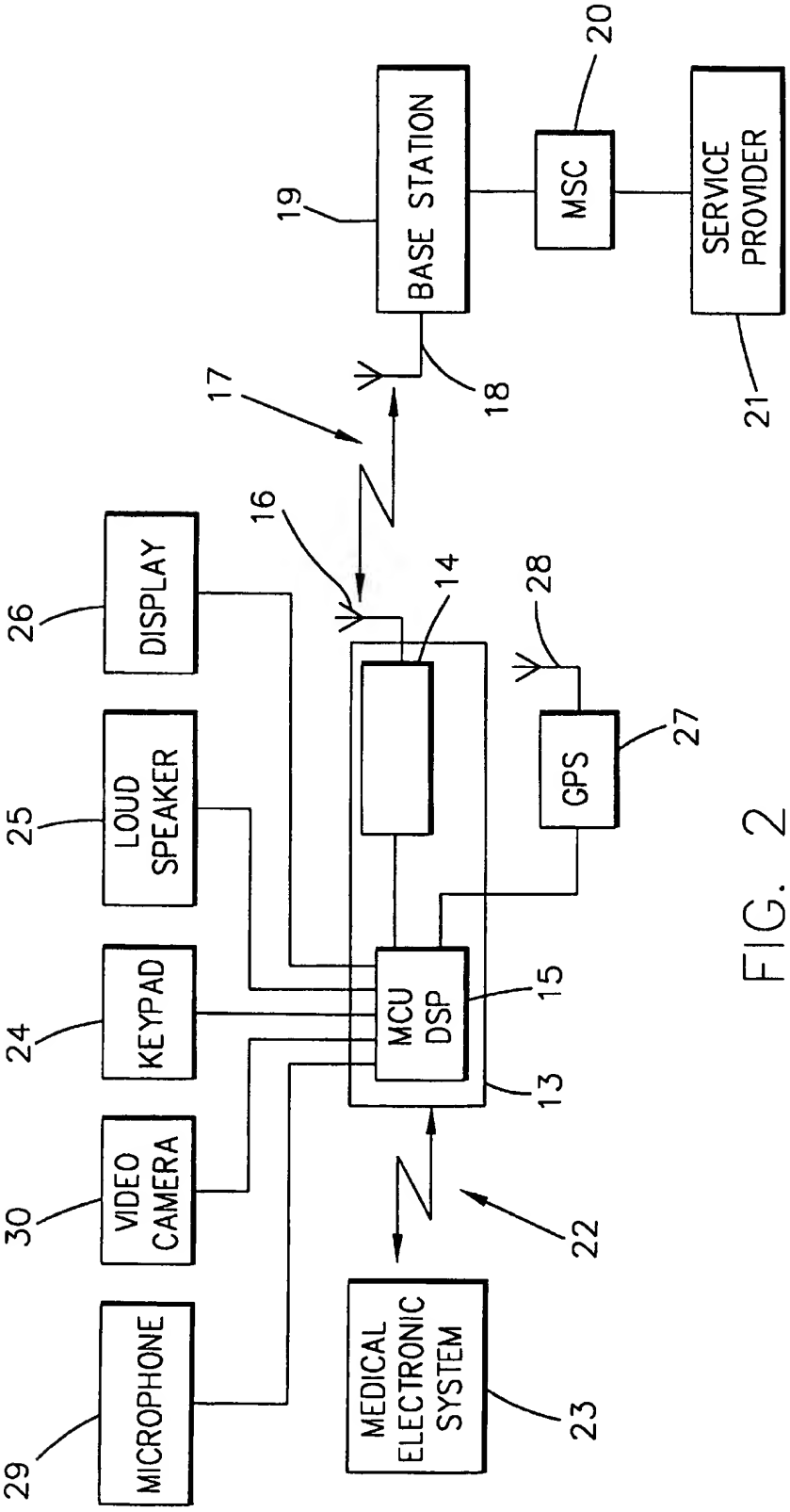

BASE STATION
MSC
SERVICE PROVIDER
DISPLAY
LOUD SPEAKER
KEYPAD
VIDEO CAMERA
MICROPHONE
MCU DSP
GPS
MEDICAL ELECTRONIC SYSTEM
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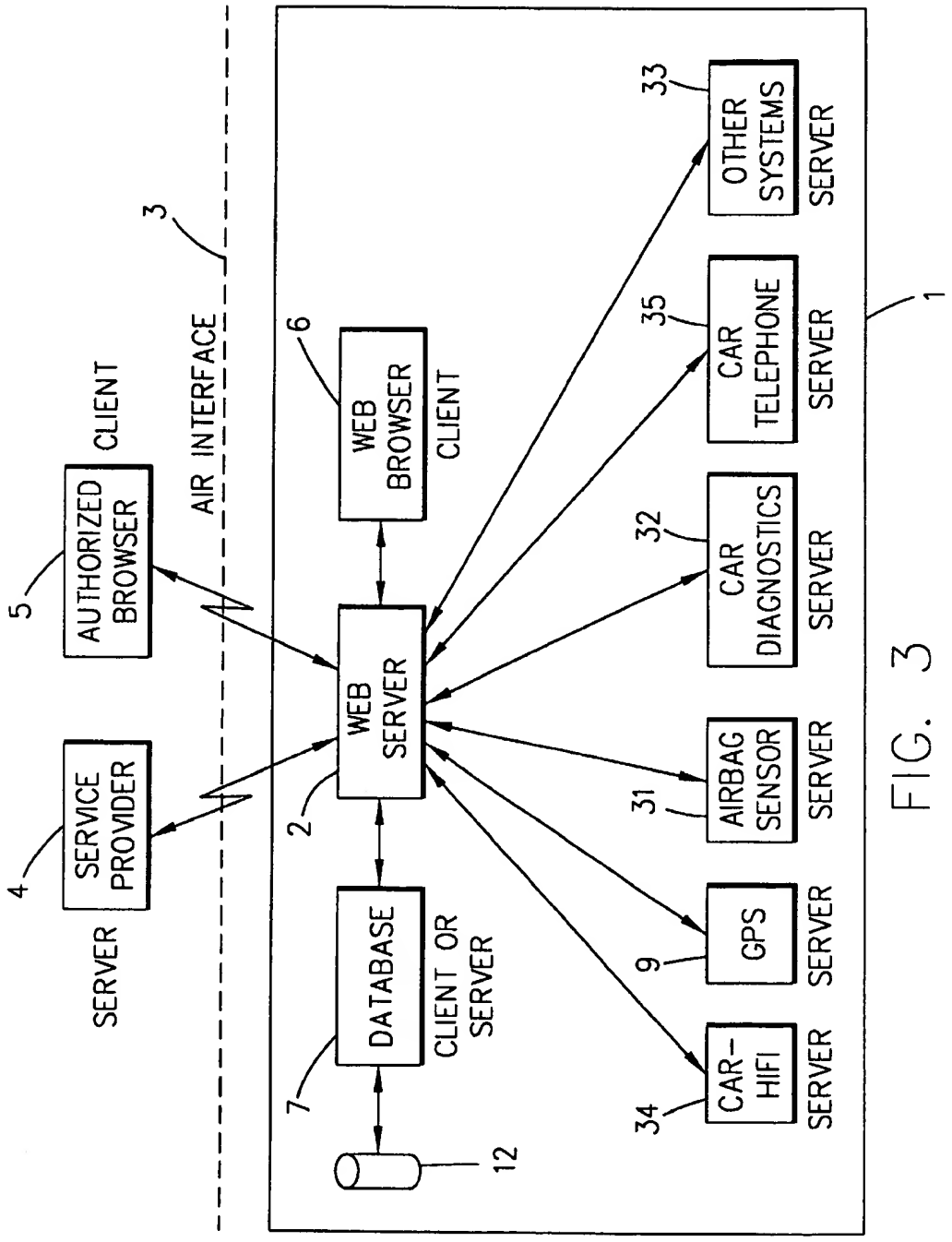
FIG. 2


AUTHORIZED BROWSER
CLIENT
5
AIR INTERFACE
3
SERVICE PROVIDER
4
SERVER
WEB BROWSER
CLIENT
6
WEB SERVER
2
DATABASE
CLIENT OR SERVER
7
12
OTHER SYSTEMS
SERVER
33
CAR TELEPHONE
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CAR DIAGNOSTICS
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32
AIRBAG SENSOR
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9
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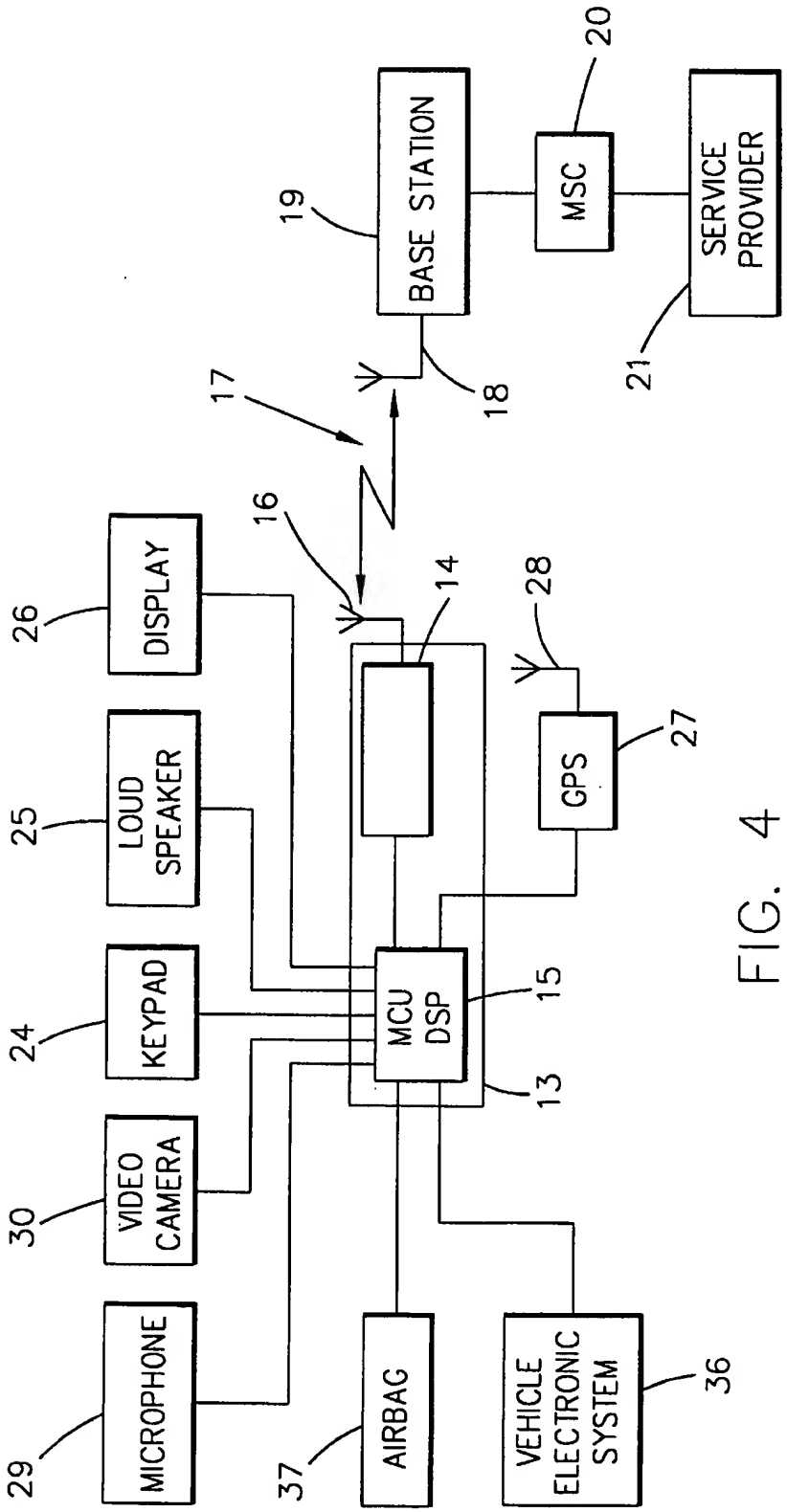
34
1

FIG. 3


BASE STATION
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MCU DSP
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VEHICLE ELECTRONIC SYSTEM
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FIG. 4

MOBILE TELEPHONE FOR INTERNET-APPLICATIONS

FIELD OF THE INVENTION

The invention relates to a mobile telephone which can be used in particular in a communications system for monitoring and/or guiding a vehicle or for monitoring the medical condition of a patient.

BRIEF DESCRIPTION OF RELATED DEVELOPMENTS

Communications systems for, for example, monitoring and/or guiding a vehicle are generally known. Thus, there are, for example, already vehicles (Internet cars) which are coupled to the Internet, which provides the driver of the vehicle with a whole series of technically interesting possibilities. A disadvantage of such vehicles is, however, that a vehicle computer which has an Internet facility and which is programmed as a stand-alone WEB server and which is connected to the Internet via a cordless mobile telephone has to be present in the interior of the vehicle. However, such vehicle computers with an Internet facility require a very large amount of space, on the one hand, and are relatively expensive, on the other hand.

The object of the invention is to develop a mobile telephone of the type mentioned at the beginning in such a way that it makes it possible to communicate on the Internet in a simpler way.

The way in which the object set is achieved is given in the characterizing part of Patent Claim 1. Advantageous refinements are presented in the subclaims.

The invention is characterized by the fact that the mobile telephone contains at least one WEB server. A WEB server is in this case a software packet which makes available specific information via an interface to the Internet, which information can be interrogated on request by other devices connected to the Internet. By virtue of the fact that the WEB server is contained in the mobile telephone, a locally independent WEB server is easily formed, said server being situated with the user of the mobile telephone at all times if the user carries the telephone with him.

As an alternative, the WEB server can also supply the information via an interface to a local network (LAN) or another network. Furthermore, it is conceivable that a plurality of WEB servers are contained in a mobile telephone, in which case, a WEB server is connected to the Internet while another WEB server may be connected to a local network. Here, it is also conceivable for the individual WEB servers contained in the mobile telephone to be coupled to one another.

According to one advantageous refinement of the invention, the at least one WEB server is contained in the microprogram control unit (MCU) of the mobile telephone. By virtue of the implementation of the WEB server in the microprogram control unit which is already present in a mobile telephone, the mobile telephone does not need to be expanded with additional components.

If the WEB server for the microprogram control unit of the mobile telephone is too large, the mobile telephone may alternatively also contain a separate microprogram control unit in which the WEB server is contained.

According to a preferred development of the invention, the at least one WEB server can be coupled to at least one further server. As a result, information which is associated in terms of content may be contained on each server, making rapid access to the corresponding information, for example for updating purposes, substantially easier. Here, the further server merely needs to be coupled to the WEB server when required, a constant link also being conceivable as an alternative.

According to a further refinement of the invention, the further server is contained in the mobile telephone, as a result of which it is likewise locally independent. However, the further server may also be one which is arranged outside the mobile telephone.

In addition, it is possible for a plurality of servers also to be contained in the mobile telephone or for a plurality of external servers to be connected to the mobile telephone via an air interface. If a plurality of servers are present, they may be, for example, continuously coupled to one another or may be coupled to one another when required. Using an external server, it is possible, for example, for specific information to be transmitted from a service provider via an air interface to the WEB server contained in the mobile telephone. This is advantageous if the information is so extensive that it is not possible to store this information on the locally independent WEB server for reasons of space.

The difference between the WEB server contained in the mobile telephone and the servers contained in the mobile telephone is that only the WEB server can be coupled to a network (Internet, LAN) via an air interface, for example.

According to another refinement of the invention, the WEB server contained in the mobile telephone can be coupled to at least one client. A client is a software packet which requests information from a server, that is to say a second software packet. A typical example is a database interrogation in which a user calls information from the database server by means of a client program.

According to one development of the invention, the at least one client is contained in the mobile telephone. As a result, the user of the mobile telephone can access the individual local servers via this client and interrogate information.

According to yet another refinement of the invention, the client which is contained in the mobile telephone is designed as a WEB browser as a result of which a user of the mobile telephone can call Internet information via an air interface by means of http.

It is also conceivable for the WEB server contained in the mobile telephone to be capable of being coupled to an external client which is designed for example, as an authorized browser and can call information from the WEB server via the air interface.

According to one preferred embodiment of the invention, the WEB server contained in the mobile telephone can itself operate as a client. As a result, the WEB server can call information from an external server (service provider), it being possible, for example, for the client which is designed as a WEB browser and is contained in the mobile telephone to be used for the access to the service provider. In addition, the WEB server is operated as a client if it calls information from one or more servers which are contained in the mobile telephone or else may be of an external design.

In accordance with one preferred embodiment of the mobile telephone according to the invention, the latter is used in a communications system for monitoring and/or guiding a vehicle. Thus, the vehicle can be supervised and controlled by the driver or by an external control centre in a relatively easy way.

According to another preferred embodiment of the mobile telephone according to the invention, it is used in a com-

munications system for monitoring the medical condition of a patient. As a result, it is possible to request medical data in order to monitor the state of health from a central control centre or from a doctor's practice and to initiate actions which may necessary. As an alternative, the user of the mobile telephone may call the information relating to his state of health by means of the WEB browser located in the telephone.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention is described in more detail below with reference to the appended drawings, in which:

FIG. **1** shows a block diagram of a communications system for monitoring a patient in which the mobile telephone according to the invention is used;

FIG. **2** shows a block diagram of the implementation of the communications system according to FIG. **1**;

FIG. **3** shows a block diagram of a communications system for monitoring and/or guiding a vehicle in which the mobile telephone according to the invention is used; and

FIG. **4** shows a block diagram of the implementation of the communications system according to FIG. **3**.

DESCRIPTION OF THE PREFERRED EMBODIMENT(S)

FIG. **1** shows a block diagram of a communications system in which the mobile telephone according to the invention (not shown) is used, in order to monitor a patient medically, the block **1** shown in FIG. **1** being contained in the mobile telephone.

The mobile telephone consequently contains a WEB server **2** which can be coupled via an air interface **3** to a service provider **4** which serves as the server. Furthermore, the WEB server **2** can be coupled via the air interface **3** to an authorised browser **5** which is designed as a client. The external service provider **4** and the external authorized browser **5** are accordingly coupled to the mobile telephone via the radio network, the data communication taking place via the WEB server **2** which is contained in the mobile telephone and which either passes on enquiries of a mobile browser **6** to the outside or receives and evaluates enquiries from the outside. For the purpose of evaluation, a local database **7** is used, which in this case functions as a server. Conversely, the database **7** may also be a client, in which case, in order to update its data stock, devices (for example a glucose measuring sensor) which are connected are called via the WEB browser **2**. The WEB browser **6** and local database **7** are likewise situated in the mobile telephone.

The data which are measured by the glucose measuring sensor are transmitted to a glucose measuring server **8** contained in the mobile telephone, and are stored there. Thus, a medical service computer (authorised browser **5**) may periodically interrogate the medical measured values (glucose concentration here) via the WEB server **2** and in the case of emergencies send back instructions. However, in the case of acute emergencies (for example deficit of sugar) which is also possible to request help automatically or manually via the mobile WEB browser **6**. For the purpose of targeted guidance in an emergency, a service computer can interrogate the location of the patient who is in difficulties by means of the authorized browser **5** which proves its access authorization by a password or a digital signature, and via the WEB server **2** of a GPS server **9** contained in the mobile telephone.

The mobile telephone also contains a pacemaker server **10** which contains information on the working range of the pacemaker.

Furthermore, the mobile telephone contains an emergency detector server **11** which, for example via an acceleration sensor, receives information indicating whether the patient has fallen. This information can be called at any time via the WEB server **2**, in which case, in an emergency, the WEB server **2** can request help automatically using the air interface **3** via the WEB browser **6**.

In order to evaluate the information contained in the GPS server **9**, glucose measuring server **8**, pacemaker server **10** and emergency detector server **11**, said information is transmitted via the WEB server **2** to the database **7** which is coupled to a further storage medium **12**. The database **7** can consequently be operated as a client or server.

FIG. **2** shows a block diagram of the implementation of the medical communications system according to FIG. **1**.

The WEB server and WEB browser are standard applications which merely have to be tailored somewhat for the concrete applications. All the other servers may be realized as C/C++programmes which can access the hardware (for example glucose measuring device or the GPS receiver). They are connected to the WEB server via a CGI (common gateway interface). With relatively large data sets it is advisable, owing to the better efficiency, to use the POST access method. In this case the gateway server communicates with the WEB browser via standard input and output.

Because these parts of the system are not visible from the outside, they can easily be replaced by other technologies (for example JAVA or VRML). There is provision for data to be stored in RAM or FLASH as a replacement for the harddisc which can be used only to a limited degree in mobile applications.

In the block diagram according to FIG. **2** there is a mobile telephone **13** in which there are a transceiver unit **14** and a microprogram control unit **15** (MCU) with a DSP.

The block **1** which is shown in FIG. **1** is, in the case of the communications system for the medical monitoring of a patient, contained completely in the microprogram control unit **15** of the mobile telephone **13** according to the invention.

By way of a first antenna **16**, the mobile telephone **13** is coupled using the transceiver unit **14** and an air interface **17** to a base station **19** containing an antenna **18**. The base station **19** can, for example, be contained in a GSM system and be coupled to a service provider **21** via a mobile switching centre (MSC) **20**.

The mobile telephone **13** is also coupled via an interface **22** to a medical electronic system **23**. This medical electronic system **23** contains a glucose measuring sensor for determining the glucose concentration of a person with diabetes or some other metabolic illness which influences the balance of sugar. The glucose concentration can be measured automatically here, the results being transmitted to the mobile telephone **13** via the interface **22**. The transfer is preferably effected in a wireless fashion (for example via a low-power and short-range RF transmission) in order to avoid the need for a permanent mechanical link between the measurement device and mobile telephone. In the event of an interruption in the transmission of data, the measurement device should store values together with their time of production. Alternatively, instead of the periodic automatic measurement by appropriate sensor electronics, the blood sugar values may also be entered regularly by the person with diabetes into the mobile terminal via a keypad **24**.

The medical electronic system **23** also contains a pacemaker with a radio transceiver module. As soon as problematic working ranges of the pacemaker are detected (for

example permanent overloading owing to exceptionally high physical activity or technical problems of the device), a message is transmitted via the interface **22** to the mobile telephone **13** located in the vicinity, and is fed via the WEB server **2** from FIG. **1** to the local database **7** and stored there. As already described above, in the event of the detection of a problematic working range of the pacemaker, the WEB browser **6** contained in the MCU **15** of the mobile telephone **13** can be started automatically, in which case, for example, an audible warning message may be output via a loudspeaker **25** or a visual warning message may be output via a display **26**. Alternatively, a warning message may also be transmitted to the service provider **21** via the interface **17**, the base station **19** and the MSC **20**.

The medical electronics system also contains an automatic help request facility which can be triggered, for example, via an acceleration sensor which detects a fall or accident. A further, technically simple solution consists in the patient registering periodically at a service point per WEB browser. If the message is not received, a voice link is set up to the patient to ask for information. If the patient does not reply, the service centre initiates a help action owing to the possible emergency. The external authorized browser **5** from FIG. **1** can make an enquiry via the WEB server of the telephone and interrogate the precise location of the person, possibly from a GPS receiver **27**. The GPS receiver **27** may likewise be integrated in the mobile telephone **13** here, in which case it receives the GPS satellite signals via a second antenna **28**.

The mobile telephone **13** additionally contains a microphone **29** and a video camera **30**. Using the microphone, a patient who has, for example, fallen may request help if he is no longer capable of operating the key pad **24**. The microphone **29** may be, for example, operated automatically if the abovementioned acceleration sensor triggers a help request.

Using the video camera **30**, a remote diagnosis of a patient may be carried out, in which case the doctor attending can also obtain a visual impression of the patient.

FIG. **3** shows a block diagram of a communications system for monitoring and/or guiding a vehicle in which the mobile telephone according to the invention is used, in which case the same reference symbols as in FIGS. **1** and **2** are used for identical components.

For vehicle applications, the same system from FIGS. **1** and **2** can be used with few modifications. The date link to medical equipment must merely be replaced here by interfaces to the vehicle electronics system and other built-in devices.

FIG. **3** shows a block **1** which is contained in a mobile telephone (for example in the MCU of the mobile telephone) and has a WEB server **2** which is coupled to a WEB browser **6** which is designed as a client.

The communications system which is shown in FIG. **3** can, for example, be used for vehicle navigation. For this purpose, a user requests a route planning operation from a service provider **4** via the WEB browser **6** by entering the destination and the peripheral conditions. The request is then locationed in a queue of a database server **7**. The database client **7** then processes requests by requesting from a GPS server **9** the current location and the current safety status from an airbag server **21** and from a diagnostic server **32**. This information is then sent to the service provider **4**. In response, the driver receives a local road map to the destination, on which map the optimum route is marked. The WEB browser **6** then periodically interrogates the database server **7** in order to output on a screen (not shown in FIG. **3**) visual information for the current location and/or to direct the driver through audible messages which are appropriate for the situation. The database client **7** remains active in the background and follows the GPS location of the driver. When the location of the vehicle reaches the boundaries of the local map, the client automatically sends a request to the service provider **4** to update the local map. Between two such requests an external data link is not necessary since all the knowledge for the local route planning operation is located in the vehicle.

The database client **7** monitors the safety status of the vehicle by periodically sending enquiries to the GPS server **9**, the airbag server **31** and the diagnostic server **32**, in order to detect critical situations. If an accident or other serious disruptions occur, the database client **7** automatically transmits an emergency call to the service provider. The latter replies with a description of the associated action to be initiated by it and opens a voice channel to the driver. In this way, if appropriate, enquiries can, if appropriate, be made regarding the health status of the occupants of the vehicle, or a help action can be effectively planned.

FIG. **3** also shows an authorized browser **5** which is designed as a client and via which a central transport data base (not shown), implemented at a forwarding agent's, has access to the entire vehicle fleet. If a fleet management application is active in the vehicle, the local database client **7** periodically transmits the GPS location, destination, status and cargo of the vehicle to the central database server which stores this information.

The communications system shown in FIG. **3** can also be used for protection against theft and for chasing vehicles, in which case the protection against theft should be initiated by the owner of the vehicle by transmitting an authorization key to the service provider **4**. If anyone enters the vehicle without permission, the local database client **7** is started automatically and periodically interrogates the current location from the GPS server **9** and transmits an alarm message with the location to the service provider **4**. The latter can then deactivate the vehicle by intervening in the engine electronics. Alternatively, the location can be reported to the police authorities.

The question regarding the technical state of a vehicle or its maintenance can be answered by interrogating the car-diagnostic server **32** which has access to the relevant technical systems in the car. The diagnostic date could be evaluated after the information has been requested in a locally connected service computer by means of the WEB browser **6**. Otherwise, this information can be interrogated by the authorized external WEB browser **5** and evaluated at a service point (for example motor vehicle workshop). An expert at a remote location can use the latter procedure to evaluate the faults in the vehicle.

As is shown in FIG. **3**, the block **1** also contains a server **33** for other systems. This server can be used, for example, for monitoring vehicle devices such as the heater, for example. The monitoring is carried out here by means of the local WEB browser **6** or else using the external authorized browser **5**. This enables the vehicle heater to be actuated from home or from the workplace.

The WEB server **2** is also coupled to a car HIFI server on which, for example, compressed audio information is stored. In mobile radios of the third generation (UMTS, successor of GSM) a considerably larger dataset can be transmitted. This makes it possible to offer personally tailored Internet Radio and Video Services if the tariffs for this are attractive

and there is a simple automatic payment registration system. A user tunes into an Internet channel by means of push technology (i.e. he receives the current information of the channel, for example a radio station, without requesting it). Alternatively a user can make contact with his private WEB server in order to transfer his desired programme (for example a compressed audio CD). The received data may be compressed audio information, MIDI music or compressed video information. This information can be called by the user via the WEB browser **6** and the WEB server **2**, as a result of which the mobile Internet terminal replaces a radio and a portable television.

FIG. **3** also shows a car telephone server **35** which is contained in block **1** and which is coupled to the WEB server **2**, and which can be accessed via the WEB browser **6** or via the authorized browser **5**.

FIG. **4** shows a block diagram of the implementation of the communications system according to FIG. **3**, identical reference numerals to those in FIG. **2** being used for identical components.

FIG. **2** and FIG. **4** differ only in that the mobile telephone **13** in FIG. **4** is coupled to a vehicle electronic system **36** and to an airbag sensor **37** (in a dedicated way or via an air interface) instead of to a medical electronic system.

The airbag sensor **37** continuously supplies signals to the airbag sensor server **31** from FIG. **3**, in which case in the event of an accident the database client **7** from FIG. **3** which continuously interrogates the airbag sensor server **31** automatically transmits an emergency call to the service provider **21** via the air interface **17**.

The vehicle electronic system **36** also continuously transmits data to the car diagnostic server **32** from FIG. **3**. As already described above, this car diagnostic server **32** can be accessed when necessary, it being also possible to intervene in the vehicle electronics system via the authorized browser **5**.

What is claimed is:

1. A mobile telephone, comprising:

at least one WEB-server wherein the web server is coupled to one or more other servers that provide data and information to the web server from corresponding data measurement systems: and

at least one WEB-browser connected to the WEB server, wherein the WEB-server is adapted to receive information and to provide the information at least to the WEB-browser.

2. A mobile telephone, comprising:

at least one WEB-server wherein the WEB server is connected to one or more medical information servers, each medical information server adapted to provide medical data from a respective diagnostic device to the WEB server; and

at least one WEB-browser connected to the WEB server; wherein the WEB-server is adapted to receive information and to provide the information at least to the WEB-browser.

3. A mobile telephone, comprising;

at least one WEB-server wherein the WEB server is connected to one or more vehicle control servers, the vehicle control servers adapted to provide vehicle information and data from respective vehicle monitoring systems to the WEB server: and

at least one WEB-browser connected to the WEB server; wherein the WEB-server is adapted to receive information and to provide the information at least to the WEB-browser.

4. The Mobile telephone according to claim **1**, wherein the at least one WEB server is contained in the microprogram control unit (MCU) of the mobile telephone.

5. The mobile telephone according to claim **1**, wherein the at least one WEB server can be coupled to at least one further server.

6. The mobile telephone according to claim **5**, wherein the further server is contained in the mobile telephone.

7. the mobile telephone according to claim **1**, wherein the WEB server can be coupled to at least one further client.

8. The mobile telephone according to claim **7**, wherein the at least one further client is contained in the mobile telephone.

9. The mobile telephone according to claim **7**, wherein the at least one further client is designed as a WEB browser.

10. The mobile telephone according to claim **7**, wherein the WEB server can itself be operated as a client.

11. The mobile telephone according to claim **1**, for use in a communications system for monitoring and/or guiding a vehicle.

12. The mobile telephone according to claim **1**, for use in a communications system for medically monitoring a patient.

13. A communication system for providing information from at least one monitoring device to a service provider comprising:

a mobile telephone; the mobile telephone including:

at least one WEB server;

at least one WEB browser adapted to communicate with the WEB server;

a database server adapted to store the information from the monitoring devices;

at least one monitoring device server adapted to retrieve information from a corresponding monitoring device; and

an external browser adapted to communicate with the WEB server in the mobile phone and receive requested information.

14. The communication system of claim **13** wherein the at least one WEB server is adapted to be connected to other servers that provide vehicle information and medical data to the WEB server.

15. The communication system of claim **13** wherein the WEB server is adapted to respond to a service provider request received via the WEB browser by extracting data and information from the database server corresponding to the request.

16. A mobile telephone for receiving and communicating information received from monitoring devices comprising:

a transceiver unit; and

a microprogram control unit coupled to the transceiver unit, the microprogram control unit comprising:

at least one WEB server; and

at least one WEB browser, wherein the WEB server and the at least one WEB browser are coupled to each other;

wherein the microprogram control unit is coupled to one or more interactive monitoring devices.

17. The system of claim **16** wherein the mobile telephone is coupled to a medical electronic system, the medical electronic system including medical monitoring devices adapted to transmit data to the mobile telephone and wherein the data is received by the WEB server and stored in the database.

18. The system of claim **16** wherein the mobile telephone is coupled to a vehicle electronic system, the vehicle electronic system providing vehicle data to the microprogram

control unit, wherein the WEB server is adapted to access the data.

19. The system of claim 16 wherein the WEB server is connected to one or more other servers that provide data from respective monitoring systems to the web server.

20. The mobile telephone according to claim 10, wherein the WEB server can be coupled to at least one external service provider.

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